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Health Department, District of Columbia.

# LAW, REGULATIONS, AND INSTRUCTIONS

RELATING TO PREVENTION OF THE SPREAD OF

### SCARLET FEVER AND DIPHTHERIA.



### LAW AND REGULATIONS

TO

### PREVENT THE SPREAD

OF

## Scarlet Fever and Diphtheria

IN THE

### DISTRICT OF COLUMBIA,

TOGETHER WITH

Directions as to Disinfection and Disinfectants.

WASHINGTON, D. C.: RAMSEY & BISBEE, PRINTERS AND BINDERS. 1892.



### AN ACT TO PREVENT THE SPREAD OF SCARLET FEVER AND DIPHTHERIA IN THE DISTRICT OF COLUMBIA.

Be it enacted by the Senate and House of Duty of Physician, Representatives of the United States of Amer-parent, guardian, nurse or other person in ica in Congress Assembled, That from and charge of patient. after the passage of this act it shall be the duty of every registered practicing physician or other person prescribing for the sick in the District of Columbia to make report to the health officer, on forms to be furnished by that officer, immediately after such practitioner becomes aware of the existence of any case of scarlet fever or diphtheria in his charge; and in case such person shall fail to so report within twenty-four hours he shall be subject to a penalty of not less than five nor more than fifty dollars, and in case of a second offense the penalty shall be not less than ten nor more than one hundred dollars. In case no physician shall be in charge of such patient the householder where such case occurred, or person in charge thereof, the parent, guardian, nurse, or other person in attendance upon the sick person knowing the character of the disease shall make the report above mentioned,

and in case of failure to report shall suffer the same penalties as provided for physicians in this act.

Placard or flag to be displayed; unlawful to remove same; premises to be disinfected.

SEC. 2. That it shall be the duty of the health officer co-operating with the attending physician to cause a suitable placard, flag, or warning sign to be displayed from the front of the premises or apartment where any one case of scarlet fever or diphtheria is present. It shall be unlawful for any person to remove such placard, sign, or warning flag when so placed, without permission of the health officer, and it shall be the duty of the said health officer, in conjunction with the attending physician, to cause the premises to be properly disinfected, and to issue the necessary instructions for the isolation of the patient.

Persons affected not to attend school nor public assemblages, nor to appear on streets.

scribe regulations.

SEC. 3. That no person shall visit or attend any public or private school, or place of public assemblage, or appear on the public streets, Health officer to pre- or in the parks while affected with scarlet fever or diphtheria, and any adult person, parent, or guardian of a minor convicted of having knowingly violated the provisions of this act, shall, upon conviction, forfeit and pay a sum not less than five nor more than fifty dollars; and it shall be the duty of physicians while in attendance upon cases of scarlet fever or diphtheria to exercise such reasonable precautions to prevent the spread of the said

diseases as may be prescribed by the health officer of the District of Columbia in regulations.

SEC. 4. That no person who has conva- Convalescents not to lesced from diphtheria or scarlet fever shall be attend schools, seminaallowed to attend any public or private school, upon certificate. seminary, or college until the attending physician shall have furnished a certificate that said patient has completely recovered, and that there is no danger of infection to other persons. All persons who shall, after convalescing from diphtheria or scarlet fever, visit schools, seminaries, or colleges, without providing themselves with such certificates, shall suffer the penalties provided for in section I of this act.

SEC. 5. That the provisions of this act shall Where provision of apply to every ship, vessel, steamer, boat or the act shall apply. craft, lying or being in the rivers, harbors, or other waters within the jurisdiction of said District, and to every tent, van, shed, hovel, barn, out-house, cabin, or other like place, as if the same were an ordinary dwelling.

SEC. 6. That the word "regulations," as Whattheterms "regherein used, shall be held to mean also rules, ulations," "persons," herein used, shall be held to mean also rules, and "practitioner of orders, and amendments. The words "per-medicine" shall be held sons in charge thereof" shall be held to mean to mean. the owner, his agent or factor; the tenant, his clerk or representative; the nurse, or any one or more persons who by reason of their position are charged with the management or care

of the premises, or interested in the person afflicted. The words "practitioner of medicine," or "practitioner," shall be held to include all persons who undertake to treat persons afflicted, either gratuitously or for pay.

Penalty for making

SEC. 7. That any person who shall knowfalse report or certifi-ingly make, sign, or deliver any false report or certificate herein provided for, upon conviction thereof in the police court of said District, shall be fined not less than five nor more than fifty dollars, and, in default of payment thereof, be committed to jail for not less than one nor more than twenty days.

Jurisdiction for enforcement of act vested in Police Court.

SEC. 8. That the expenses necessarily incurred in the execution of the provisions of this act shall be borne from the general appropriation for the maintenance of the health department of the District of Columbia, and the jurisdiction of civil and criminal procedure in the enforcement of this act is hereby vested in the police court of the said District, with the same right of appeal as in other civil and criminal trials in said District.

Approved December 20, 1890.

### REGULATIONS.

The following regulations, provided for in the Act of Congress approved December 20, 1890, are promulgated for the information of all concerned.

The Act referred to provides in Section 2, "That it shall be the duty of the Health Officer, in conjunction with the attending physician, to cause the premises to be properly disinfected, and to issue the necessary instructions for the isolation of the patient"; in Section 3, "That it shall be the duty of physicians, while in attendance upon cases of scarlet fever and diphtheria, to exercise such reasonable precautions to prevent the spread of the said diseases as may be prescribed by the Health Officer of the District of Columbia, in regulations"; in Section 6, "That the word 'regulations' as herein used shall be held to mean also rules, orders, and amendments."

The term scarlet fever as applied in the Act shall be held to include scarlatina, scarlet rash, and canker rash, and each and every case must be reported upon the orms provided.

Warning signs shall remain displayed on houses in cases of scarlet fever for a period of not less than four weeks, and in cases of diphtheria for not less than three weeks from date of report to the Health Officer, and for a longer period unless report of recovery by the physician in attendance has been made.

In cases of death the warning sign shall remain displayed upon premises for a period of not less than seven days, and longer, unless the Health Officer is satisfied that all proper means have been employed for prevention of the spread of the contagion.

It shall be the duty of the householder, in every case where a warning sign has been displayed from the premises which he or she occupies, to report promptly the removal of such sign at any time within the periods given.

It shall be the like duty of the physician in attendance to make such report to the Health Officer of the removal of warning signs, unless assured that report has been made by some one from the premises where the disease is prevailing or has prevailed.

It shall be the duty of the physician in attendance to report, in every instance, on the forms provided, whether or not children in the family or other children in the same building attend school, and at what school building or buildings.

Children shall not be permitted to return to school from infected premises, except upon presentation of the proper certificate from the Health Officer.

All persons suffering from either diphtheria or scarlet

fever are to be isolated in rooms as far removed as possible from those occupied by other persons in the building, and upon the top floor, where it is practicable. No person, other than the physician in attendance, the examining official, and the nurse or nurses, shall be admitted to such room during the prevalence of the disease.

Every room occupied by a patient suffering from either diphtheria or scarlet fever shall be cleared of all needless clothing, carpets, drapery, and other materials likely to harbor the poisons of the disease.

Soiled bed and body linen shall be immediately placed in vessels of water containing a solution of bi-chloride of mercury, chloride of zinc, or other suitable disinfectant.

Excremental discharges from the patient shall be received in vessels of water containing such a solution, and all vessels used shall be kept scrupulously clean and thoroughly disinfected.

Discharges from the throat, nose, and mouth shall be received upon pieces of cloth, which must be immediately burned

All persons recovering from either diphtheria or scarlet fever shall be considered *dangerous*, and shall not be permitted to associate with others, or to attend school, church, or any public assembly, until a certificate has been furnished by the Health Officer to the effect that they may go abroad without danger of disseminating the contagion.

It shall be the duty of the person in charge of the premises where a case of diphtheria or scarlet fever exists, to exercise all reasonable care in the prevention of the commingling of persons who come in contact with the patient, or any other persons, whereby the contagion might be disseminated.

The body of a person who has died from either diphtheria or scarlet fever shall be immediately disinfected and placed in a coffin, which shall be tightly closed, and shall not be taken to any church or place of public assembly, and shall be buried within forty-eight hours, unless otherwise ordered by the Health Officer.

No public funeral shall be held in a dwelling in which there is a case of either diphtheria or scarlet fever, nor in which a death from either of said diseases has recently occurred.

Immediately upon the recovery of a person who has been suffering from either diphtheria or scarlet fever, or upon the death of a person who has been so suffering, the room or rooms occupied shall be thoroughly disinfected by exposure for several hours to the fumes of chlorine gas, or of burning sulphur, and shall thereafter be thoroughly cleaned and exposed to currents of fresh air.

All clothing, bedding, carpets, and other textiles which have been exposed to the contagion of the disease shall be either burned, exposed to super-heated steam, or thoroughly boiled.

No person shall interfere with or obstruct the entrance, inspection, and examination of any building or house, by the inspectors or officers of this department, when there has been reported the case of a person sick with either scarlet feyer or diphtheria therein.

### DISINFECTION AND DISINFECTANTS.

The following general directions respecting disinfection and disinfectants are the outcome of the labors of Dr. George M. Sternberg and his colleagues on the committee on disinfectants of the American Public Health Association, and are given here for the guidance of the public as the best information on the subject extant:

### DISINFECTION OF EXCRETA, ETC.

The infectious character of the dejections of patients suffering from cholera and from typhoid fever is well established; and this is true of mild cases and of the earliest stages of these diseases as well as of severe and fatal cases. It is probable that epidemic dysentery, tuberculosis, and perhaps diphtheria, yellow fever, scarlet fever, and typhus fever may also be transmitted by means of the alvine discharges of the sick. It is therefore of the first importance that these should be disinfected. In cholera, diphtheria, yellow fever, and scarlet fever, all vomited material should also be looked upon as infectious; and in tuberculosis, diphtheria, scarlet fever, and infectious pneumonia, the sputa of the sick shall be disinfected or destroyed by fire. It seems advisable also to treat the urine of patients sick with an infectious dis-

ease with one of the disinfecting solutions below recommended.

Chloride of lime, or bleaching powder, is perhaps entitled to the first place for disinfecting excreta, on account of the rapidity of its action. The following standard solution is recommended: Dissolve chloride of lime of the best quality (good chloride of lime should contain at least 25 per cent. of available chlorine. It may be purchased by the quantity at 3½ cents per pound. The cost of the standard solution recommended is therefore but little more than 1 cent a gallon. A clear solution may be obtained by filtration or by decantation, but the insoluble sediment does no harm, and this is an unnecessary refinement) in pure water, in the proportion of six ounces to the gallon.

Use one quart of this solution for the disinfection of each discharge in cholera, typhoid fever, etc. (for a very copious discharge use a large quantity). Mix well and leave in the vessel for at least one hour before throwing into privy-vault or water-closet. The same directions apply for the disinfection of vomited matter. Infected sputum should be discharged directly into a cup half full of the solution. A 5 per cent. solution of carbolic acid may be used instead of the chloride of lime solution, the time of exposure to the action of the disinfectant being four hours.

### DISINFECTION OF THE PERSON.

The surface of the body of a sick person, or of his attendants, when soiled with infectious discharges, should be at once cleansed with a suitable disinfectant agent.

For this purpose solution of chlorinated soda (liquor sodae-chlorinate) diluted with nine parts of water, or the standard solution of chloride of lime diluted with three parts of water may be used. A 2 per cent. solution of carbolic acid is also suitable for this purpose, and under proper medical supervision the use of a solution of corrosive sublimate—I: 1000—is to be recommended.

In diseases like small-pox and scarlet fever, in which the infectious agent is given off from the entire surface of the body, occasional ablutions with the above-mentioned solution of chlorinated soda are recommended.

In all infectious diseases the body of the dead should be enveloped in a sheet saturated with the standard solution of chloride of lime, or with a 5 per cent. solution of carbolic acid, or a 1:500 solution of corrosive sublimate.

### DISINFECTION OF CLOTHING.

Boiling for half an hour will destroy the vitality of all known disease germs, and there is no better way of disinfecting clothing or bedding which can be washed than to put it through the ordinary operations of the laundry. No delay should occur, however, between the time of removing soiled clothing from the person or bed of the sick, and its immersion in boiling water, or in one of the following solutions until this can be done:

Corrosive sublimate, one drachm to the gallon of water (about 1:1000), or,

Carbolic acid, pure, one ounce to the gallon of water, (1:128).

The articles to be disinfected must be thoroughly

soaked with the disinfecting solution and left in it for at least two hours, after which they may be wrung out and sent to the wash.

N. B.—Solutions of corrosive sublimate should not be placed in metal receptacles, for the salt is decomposed and the mercury precipitated by contact with copper, lead, or tin. A wooden tub or earthen crock is a suitable receptacle for such solutions.

Clothing or bedding which can not be washed should be disinfected by steam in a properly constructed disinfection chamber. In the absence of a suitable steam disinfecting apparatus, infected clothing and bedding should be burned.

#### DISINFECTION OF THE SICK-ROOM.

In the sick-room no disinfectant can take the place of free ventilation and cleanliness. It is an axiom in sanitary science that it is impracticable to disinfect an occupied apartment for the reason that disease germs are not destroyed by the presence in the atmosphere of any known disinfectant in respirable quantity. Bad odors may be neutralized, but this does not constitute disinfection in the sense in which the term is here used. These bad odors are, for the most part, an indication of want of cleanliness, or of proper ventilation; and it is better to turn contaminated air out of the window or up the chimney than to attempt to purify it by the use of volatile chemical agents, such as carbolic acid, chlorine, etc., which are all more or less offensive to the sick, and are useless so far as disinfection, properly so called, is concerned.

When an apartment which has been occupied by a person sick with an infectious disease has been vacated, it should be disinfected. The object of disinfection in the sick-room is mainly the destruction of infectious material attached to surfaces, or deposited as dust upon window ledges, in crevices, etc. If the room has been properly cleansed and ventilated while still occupied by the sick person, and especially if it was stripped of carpets and unnecessary furniture at the outset of his attack, the difficulties of disinfection will be greatly reduced.

All surfaces should be thoroughly washed with the standard solution of chloride of lime diluted with three parts of water, or with 1: 1000 solution of corrosive sublimate. The walls and ceiling, if plastered, should be subsequently treated with a lime-wash. Especial care must be taken to wash away all dust from window ledges and other places where it may have settled, and thoroughly to cleanse crevices and out-of-the-way places. After this application of the disinfecting solution, and an interval of twenty-four hours or longer for free ventilalation, the floors and wood-work should be well scrubbed with soap and hot water, and this should he followed by a second more prolonged exposure to fresh air, admitted through open doors and windows.

As an additional precaution, fumigation with sulphuric acid gas is to be recommended, especially for rooms which have been occupied by patients with small-pox, scarlet fever, diphtheria, typhus fever, and yellow fever. But fumigation with sulphurous acid gas alone, as commonly practised, cannot be relied upon for disinfection

of the sick-room and its contents, including bedding, furniture, infected clothing, etc., as is popularly believed.

When fundigation is practised, it should precede the general washing with a disinfectant solution, heretofore recommended. To ensure any results of value, it will be necessary to close the apartment to be disinfected as completely as possible by stopping all apertures through which the gas might escape, and to burn not less than three pounds of sulphur for each thousand cubic feet of air space in the room. To secure complete combustion of the sulphur, it should be placed in powder or in small fragments, in a shallow iron pan, which should be set upon a couple of bricks in a tub partly filled with water, to guard against fire. The sulphur should be thoroughly moistened with alcohol before igniting it.

### DISINFECTION OF PRIVY-VAULTS, CESSPOOLS, ETC.

When the excreta (not previously disinfected) of patients with cholera or typhoid fever have been thrown into a privy-vault, this is infected, and disinfection should be resorted to as soon as the fact is discovered, or whenever there is reasonable suspicion that such is the case. It will be advisable to take the same precautions with reference to privy-vaults into which the excreta of yellow fever patients have been thrown, although we do not definitely know that this is infectious material.

For this purpose the standard solution of chloride of 'lime may be used in quantity proportioned to the amount of material to be disinfected, but where this is considerable it will scarcely be practicable to sterilize the whole

mass. The liberal and repeated use of this solution, or of a 5 per cent. solution of carbolic acid, will, however, disinfect the surface of the mass, and is especially to be recommended during the epidemic prevalence of typhoid fever or of cholera.

All exposed portions of the vault, and the wood work above it, should be thoroughly washed down with the disinfecting solution. Instead of the disinfecting solutions recommended, chloride of lime in powder may be daily scattered over the contents of the privy-vault.

C. M. HAMMETT, M. D., Health Officer.





